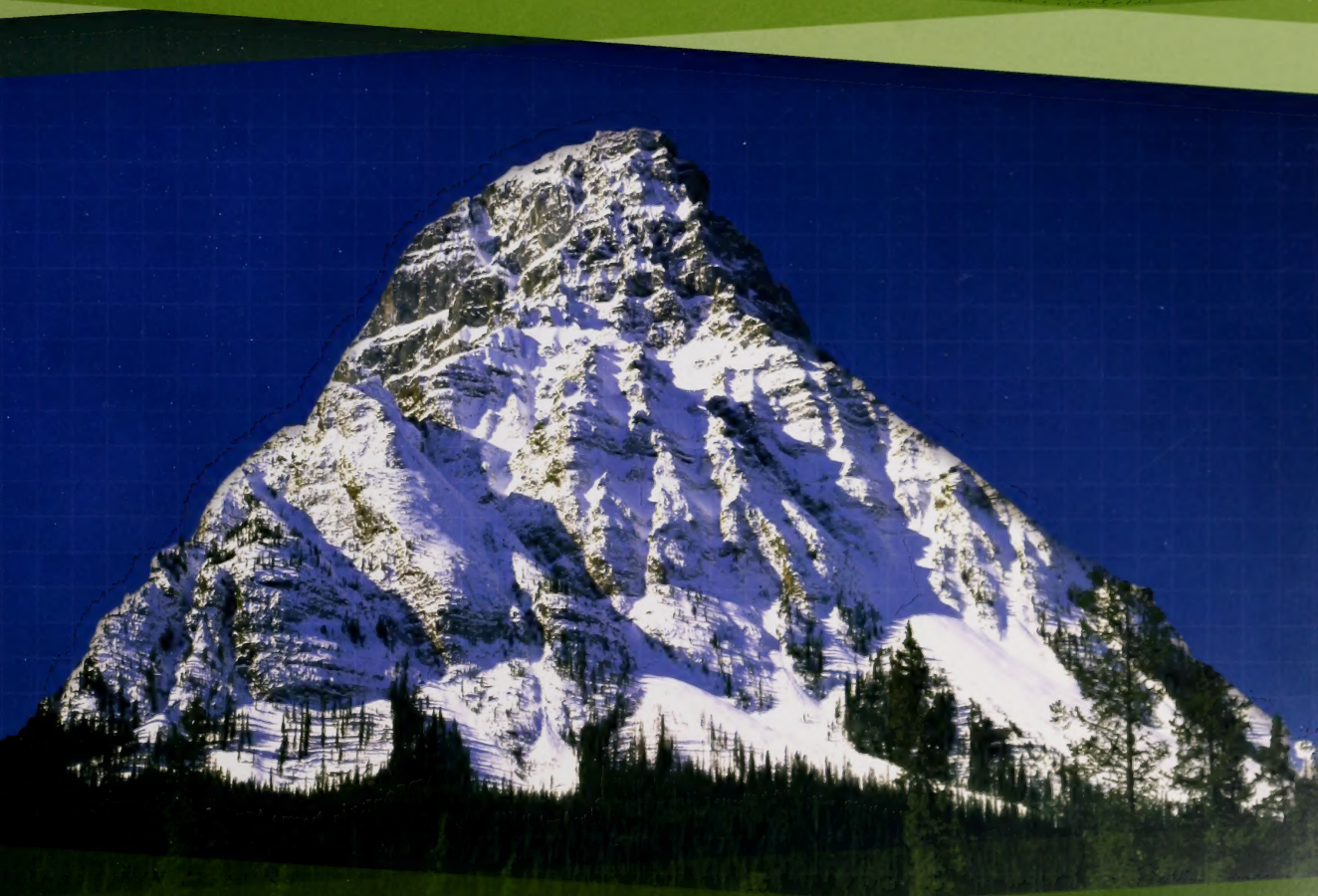


2011-02-02

# Highlights of the Alberta Competitiveness Council's

REPORT ON COMPETITIVENESS

ALBERTA 2010





## About the Alberta Competitiveness Council

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The Alberta Competitiveness Council (the Council) - a group of elected officials and industry leaders - has taken on the task of working together to make Alberta one of the most attractive places to invest and do business. Premier Ed Stelmach established the Council through the Alberta Competitiveness Act. The Act lays the groundwork for the province to be among the most competitive jurisdictions in the world and strengthens partnerships among government, industry, business and Albertans.

Making Alberta more competitive is vital to the province's long-term success and to the well-being of Albertans, business, and communities. A more competitive economy is able to adapt quickly and improves living standards for all Albertans.

The Council will provide an analysis of Alberta's competitiveness in comparison to other national and international jurisdictions and make recommendations to improve Alberta's position. The Council began its work by assessing various factors that impact the province's economic growth such as regulation and fiscal policy, the availability of skilled workers, transportation and infrastructure, productivity, and innovation.

This benchmarking work is the beginning of an ongoing annual process. Through the coordinated efforts of industry and government, there will be improvements to Alberta's overall prosperity and to the competitiveness of our businesses.

### Alberta Competitiveness Council:

#### *COUNCIL CO-CHAIRS*

**Ed Stelmach**  
Premier of Alberta

**Bob Brawn**  
Chair, Alberta Economic Development Authority

**Ted Morton**  
Minister, Alberta Finance and Enterprise

#### *OVERALL ECONOMIC FACTORS OF COMPETITIVENESS TASK TEAM*

**Doug Griffiths**  
MLA, Battle River-Wainwright

**Les Larocque**  
President, Botting and Associates Alberta Ltd.

#### *AGRICULTURE TASK TEAM*

**George Groeneveld**  
MLA, Highwood

**Christoph Weder**  
SpiritView Ranch

#### *FINANCIAL SERVICES TASK TEAM*

**Janis Tarchuk**  
MLA, Banff-Cochrane

**Greg Turnbull**  
Partner, McCarthy Tétrault LLP

#### *MANUFACTURING TASK TEAM*

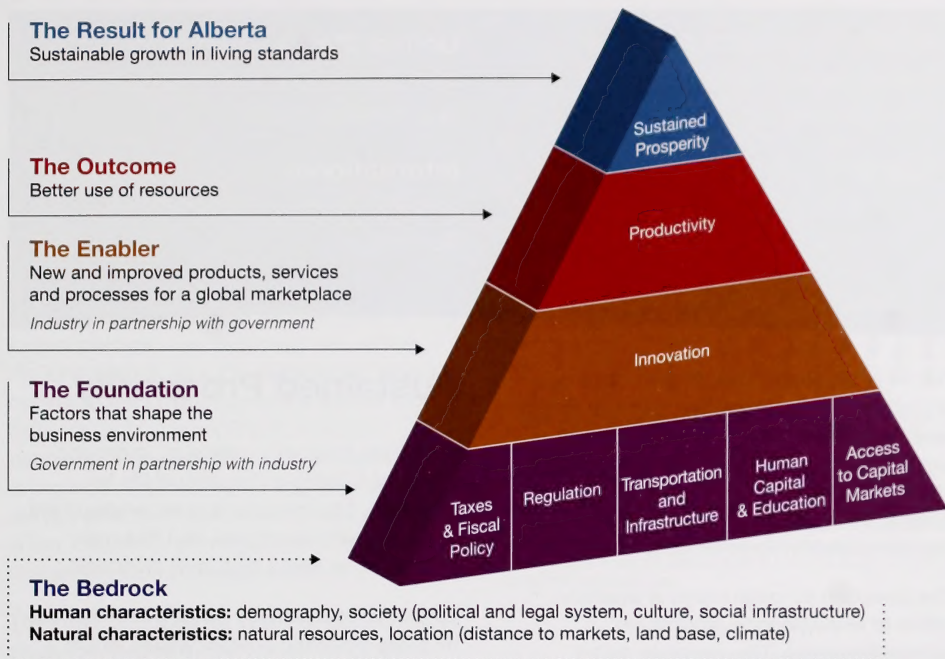
**George Rogers**  
MLA, Leduc-Beaumont-Devon

**Larry Kaumeyer**  
President and CEO, Almita Manufacturing

#### *PETROCHEMICALS/CHEMICALS TASK TEAM*

**Ray Prins**  
MLA, Lacombe-Ponoka

**Val Mirosh**  
President, Mircan Resources Ltd



## Benchmarking Alberta's Competitiveness

In the Competitiveness Pyramid, the bottom layer is the bedrock: a series of human and natural characteristics within every jurisdiction which generally only change incrementally over time. The Pyramid's bedrock comprises characteristics such as the location, climate, geography, political system, and social or cultural aspects of society.

The foundation layer is composed of the key structural areas upon which a competitive environment is built. These are factors that government is primarily responsible for shaping, and include taxes and fiscal policy, regulation, transportation and infrastructure, human capital and education, and access to capital markets.

Any competitive environment enables and requires continual innovation. Innovation is any new way of doing something better – like investing in new machinery and equipment, adopting more effective processes, training skilled labour, or undertaking research and development (R&D) activities.

Innovation is any new way of doing something better – like industry taking the lead in investing in new machinery.

Growth in productivity simply means a better use of resources, rather than relying on more people to work more hours. Productivity gains are essential to sustained prosperity and this is what matters for Albertans – as sustained prosperity means a higher quality of life and improved living standards.

The Council has developed a report that benchmarks the current state of Alberta's competitiveness. The report identifies areas of strength, highlights areas where opportunities for improvement may exist, and defines benchmarks for measuring future progress. By reviewing Alberta's position in comparison to 14 jurisdictions and across 60 indicators, the Council's report provides government and industry with the necessary information to improve the province's future competitiveness.



*A total 14 jurisdictions have been chosen for comparison with Alberta:*

**Canada** – British Columbia, Saskatchewan, Manitoba, Ontario, and Quebec.

**United States** – Colorado, Idaho, Minnesota, Oregon, Texas, and Washington State.

**International** – Finland, Norway, and the state of Queensland, Australia.

The 14 jurisdictions were chosen because of their similar size, location, relatively strong recent economic performance, and/or other similarities with Alberta. The indicators were selected using three criteria: relevance for Alberta, the reliability of available data, and comparability to other jurisdictions.

The complete 80-page report is available online at [www.finance.alberta.ca/competitiveness](http://www.finance.alberta.ca/competitiveness). The complete report includes more measurement detail and an overview of the four sectors of focus for 2010/11: agriculture (grains and oil seeds), financial services, manufacturing, and petrochemicals/chemicals.

Alberta's performance in the benchmarking comparisons is generally positive – a result that is not surprising given the strength and dynamic nature of the Alberta economy.

Alberta's strongest result is in the area of taxes and fiscal policy. Alberta also shows good results in the indicators for sustained prosperity, regulation, transportation and infrastructure, and human capital.

The results for productivity, innovation, and access to capital markets identify areas where focus and improvement could add to Alberta's competitiveness. Specifically, the areas where Alberta ranks behind other jurisdictions include growth in real GDP per capita, rate of productivity growth, non-resource exports, R&D investment, high-tech employment, and venture capital investment.

Industry and government are working together to elevate awareness of Alberta's position and take actions necessary to improve Alberta's competitiveness.

## Sustained Prosperity

Sustained prosperity means an improving standard of living and quality of life for Albertans. This includes a good environment, positive health outcomes, and first-rate education, as well as a high level of income.

Economic prosperity is typically represented by gross domestic product (GDP), which reflects the total income generated by the economy each year. While GDP represents one important measure of economic prosperity, to be truly competitive economic, social, and environmental considerations must be balanced.

## Key Measures:

After-tax personal income, housing affordability, the state of the job market, and an index of economic well-being are the key indicators for sustained prosperity.

Alberta has a high level of GDP per capita, which is attributable to the strength of the resource sector and high resource prices in recent years. Growth in real GDP per capita has been modest and between 2003 and 2008 Alberta had the 5<sup>th</sup> lowest growth rate of the jurisdictions examined. Real GDP per capita removes the effects of changing prices, including prices for natural resources. In essence, it is the change in the production of goods and services per person.



Real personal income grew between 2003-2008 at an average annual rate of 4%, more than three times the rate of real GDP per capita growth. Much of this can be attributed to workers benefiting from the booming economy.

Alberta's housing affordability declined significantly between 2005 and 2007, but has since stabilized and improved relative to the other Canadian provinces.

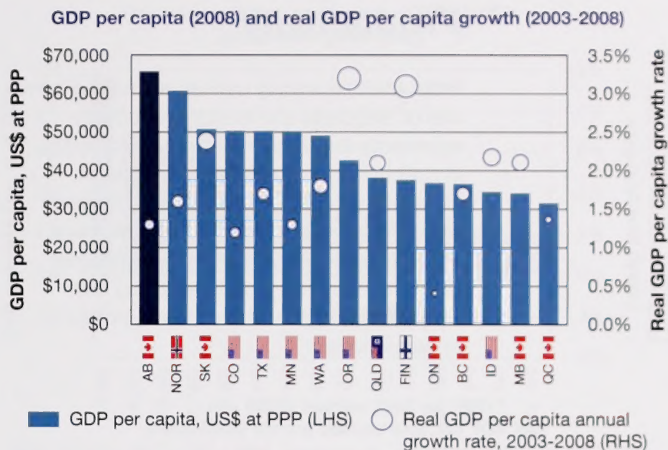
From 2005-2009, Alberta had the second-lowest average unemployment rate among the jurisdictions, at 4.2%. A balanced labour market where unemployment is neither too high nor too low is important to sustain prosperity. For example, when unemployment is too high Albertans suffer and their skills are not effectively used and if unemployment is too low labour shortages occur creating challenges for business growth.

The Index of Economic Well-being used in this study, developed by the Centre for Study of Living Standards, incorporates economic, social and environmental measures. Alberta ranked 2<sup>nd</sup> on this Index and had the greatest increase of all jurisdictions between 2002 and 2008.

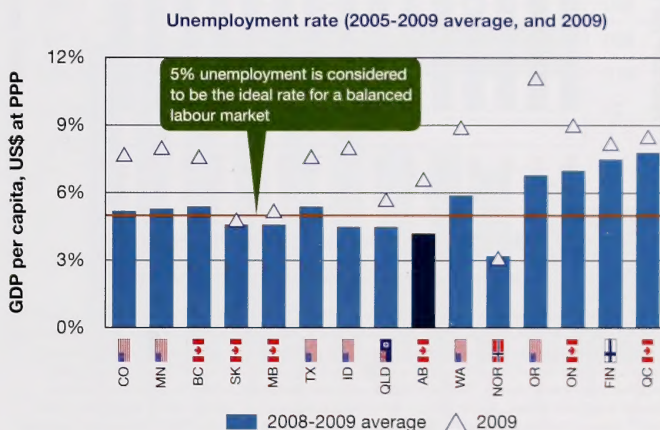
## What it means for Alberta:

Alberta has achieved a good rating for sustained prosperity. Certainly higher resource prices have played an important role in this outcome; however, both industry and government have strategically positioned Alberta to capitalize on available opportunities. Alberta has prospered.

Challenges still remain. The Alberta economy is sensitive to global economic cycles and global energy demand. The province cannot afford to rest on its economic laurels and assume future prosperity is assured. Some of Alberta's prosperity today is actually a depletion of our province's natural wealth. We must avoid attitudes of complacency arising from this advantage that Alberta enjoys, and work diligently to enhance productivity and innovation in order to improve our quality of life.



Notes: GDP per capita at current prices is in US\$ at PPP. Real GDP per capita growth is based on GDP at 2002 price levels, in local currency. Sources: Statistics Canada CANSIM Tables 384-0002 (GDP) and 051-0001 (Population); US Bureau of Economic Analysis, Regional Economic Accounts and US Census FactFinder; Statistics Norway, subject 09-01, Annual national accounts, Table 2; Statistics Finland PX WebStat Database, National Accounts; Eurostat: Population by sex, age group and citizenship; Queensland Treasury, State Accounts, Tables 1 and 11; Australian Bureau of Statistics Publication 3101.0 Table 4; OECD PPP exchange rates.

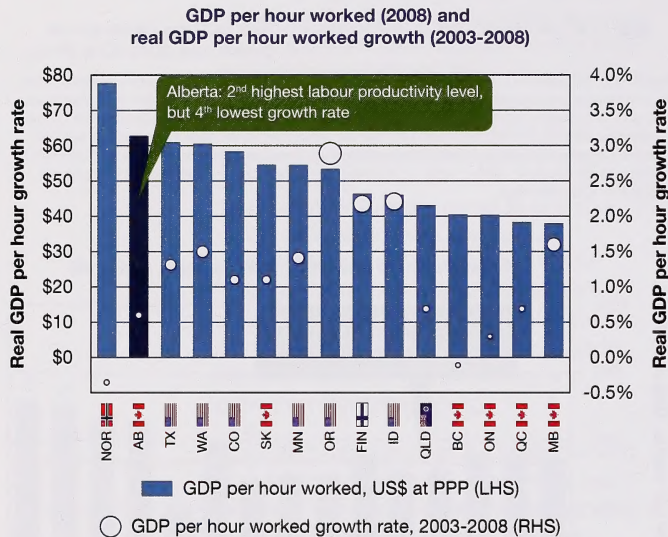


Notes: The order of jurisdictions in this chart is based on their deviation, in absolute terms, from an unemployment rate of 5%, which is treated as representing Alberta's ideal balanced labour market that works in the best interests of both employees and employers. Sources: Statistics Canada, Labour force survey estimates, Table 282-0002; US Bureau of Labour Statistics, Local Area Unemployment Statistics; Eurostat, Unemployment rates by gender; Australian Bureau of Statistics, 6202 Labour Force, Australia, as reported by the Queensland Office of Economic and Statistical Research. Ideal unemployment rate for Alberta of 5% is from Building and Educating Tomorrow's Workforce, Alberta's 10 Year Strategy, Government of Alberta, 2006.



## Productivity

Productivity is simply defined as making better use of resources and labour productivity represents the single most important factor in maintaining and enhancing long term sustained prosperity. Productivity improves by working smarter – by finding new ways to produce more value with the same level of effort. Improved productivity may be achieved through new processes, products, or technologies.



Notes: GDP per hour worked at current prices is in US\$ at PPP. Real GDP per capita growth is based on GDP at 2002 price levels, in local currency. Queensland numbers are based on assumption that average annual hours worked per employee in Queensland is equal to the national average. Sources: Statistics Canada CANSIM Tables 384-0002 (GDP) and 383-0009 (Hours); US Bureau of Economic Analysis, Regional Economic Accounts (GDP) and Bureau of Labor Statistics, Current Employment Statistics (Hours); Statistics Norway, subject 09-01, Annual national accounts, Tables 1 and 2 (GDP), and Table 05217 (Hours); Statistics Finland PX WebStat Database, National Accounts (GDP and Hours); Australian Bureau of Statistics Publication 3101.0 Table 4 (GDP) and 6202.0 Tables 12 and 19 (Hours); OECD PPP exchange rates.

## Key Measures:

Labour productivity levels and growth (both overall and in key sectors), as well as international trade performance, are used to assess Alberta's competitiveness.

Alberta's level of productivity ranks 2<sup>nd</sup> overall with GDP per hour worked of US\$62.80. Yet, Alberta's real productivity growth is comparatively weak. The high value of natural resources combined with the capital intensity of the oil sand developments explains much of this result. In other words, Alberta has a high level of productivity, but struggles to find new ways to produce more value from the same level of effort.

Alberta companies ranked 10<sup>th</sup> among the 15 jurisdictions for non-resource exports per capita in 2009. This underscores that our economy is highly focused on resource extraction.

## What it means for Alberta:

Sustainable growth in GDP – and sustained prosperity – must result from working smarter and improving productivity. Productivity gains in the resource sector are important, but challenging in the face of production declines in the conventional energy resource sector and the front end capital intensity of oil sands developments. The segments of our economy beyond resource extraction are also critical to provide balance and must compete with the world's best. In all sectors of Alberta's economy, innovation will be the key to resolving the productivity challenge.

*Alberta's level of productivity ranks 2<sup>nd</sup> overall...yet, Alberta's real productivity growth is comparatively weak.*



# Innovation

Innovation is the creation of new and improved products, services, and processes for a global marketplace and represents a critical driver of productivity growth in the modern knowledge-driven economy. The one common element in all forms of innovation is that people are the critical source for new and improved ideas, services and products.

## Key Measures:

The measures selected for jurisdictional comparison of innovation focus on its process and outcomes. The full report includes indicators for R&D, university patents, business investment in innovative technologies, employment in selected sectors, and entrepreneurship.

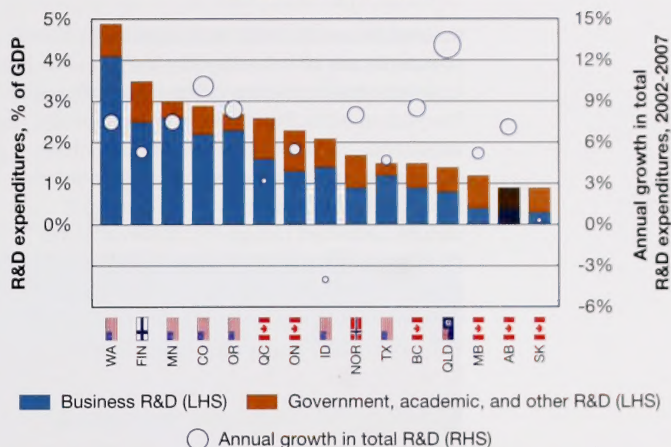
Alberta ranks below average for both total and business R&D intensity; however, between 2002 and 2007, Alberta did experience growth of 7.1 % in total R&D expenditures.

The proportion of high growth firms and new business start-ups was used as a measure for entrepreneurship. Alberta leads among the nine jurisdictions compared, with almost 8% of firms meeting the criteria for high growth firms and also ranked first among the 12 provinces and states compared for new business start-ups.

## What it means for Alberta:

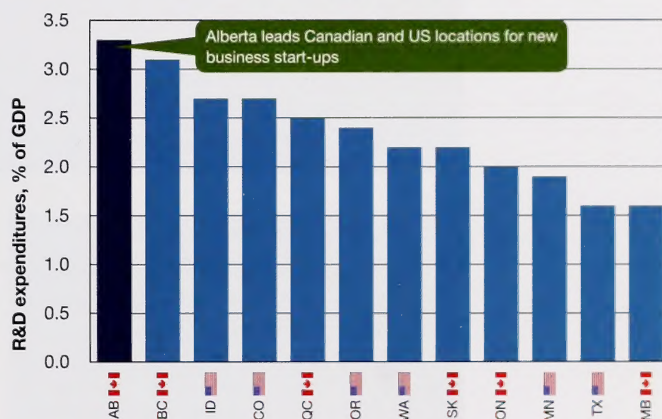
Innovation goes beyond just new ideas – these ideas must have value to the end user or improve existing processes, products, or services. Growth in the quality and skill of Alberta's workforce, improved R&D intensity levels, and strategic investments in machinery and equipment and other innovative technologies are critical to improving our innovation performance. Alberta has many of the raw ingredients necessary to meet the challenge. Industry and government must work together to harness our creativity and bring new ways of thinking, managing, creating and doing business to market.

R&D expenditures, percentage of GDP (2007)  
and growth (2002-2007)



Sources: Statistics Canada, CANSIM Table 358-0001; OECD Stats.Extract, Regional Statistics, Large Regions, Innovation Indicators; Australian Bureau of Statistics Catalogue 8112.0, Research and Experimental Development, All Sector Summary, By Location.

New business start-ups, per 1,000 population (2005)



Sources: Statistics Canada, Small and Medium Sized Enterprises Data Warehouse, December 2008 (on CD with AFE). US Census Bureau, Business Dynamics Statistics, Firm Age by Firm Size by State.



# Foundation

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Innovation, productivity, and sustained prosperity are all influenced by the competitiveness factors in the Pyramid's foundation including: taxes and fiscal policy, regulation, transportation and infrastructure, human capital, and access to capital markets. Developing a robust foundation does not ensure sustained prosperity; however, if the foundation is weak, achieving sustained prosperity becomes far more challenging. Overall, Alberta has a very strong foundation but there remains room for improvement.

## Competitiveness Factors:

### TAXES AND FISCAL POLICY

Alberta ranks 2<sup>nd</sup> in its net financial assets as a result of the province's policies related to debt financing and significant natural resources. Alberta has a low corporate income tax rate and does not levy other taxes such as capital, payroll, and sales taxes. Alberta's leadership in this indicator means the province is well positioned to make strategic investments to enhance competitiveness.

### REGULATION

Measuring regulation is complex. The quality, integration, and processes of regulatory development and reform are important; moreover, the effect of regulation on business productivity and innovation is also a critical consideration. Two indicators considered are the costs and time to start a business, which is inclusive of provincial incorporation and municipal licensing and permitting. Alberta's major cities rate well against international peers and the province continues to evaluate the relevancy, transparency, and efficiency of government regulation.

### TRANSPORTATION AND INFRASTRUCTURE

Public infrastructure, transportation, utilities, and technological infrastructure support the modern economy. Among the six Canadian provinces compared, Alberta has the second-lowest age of public infrastructure. Alberta's investments in high quality infrastructure contribute to quality of life for individuals, and facilitate the ease and cost of doing business. In technology infrastructure, Alberta ranks 2<sup>nd</sup> for broadband internet access at home.

### HUMAN CAPITAL AND EDUCATION

Human capital and education encompasses the collective knowledge, skills, and competencies of Albertans. Having workers with the skills required in the economy is essential. Alberta generally fares well across the 11 measures, especially in apprenticeship training. Alberta students' high scores also reflect favourably on the province's future workforce. However, Alberta does lag the United States in both high school and bachelor degree completion. In addition to education, the size and age of the workforce is also important. Alberta has a relatively young labour force, yet population aging remains an issue.

### ACCESS TO CAPITAL MARKETS

Access to capital influences the ability of the economy to prosper at every level. Alberta has a high level of foreign investment in its economy, bringing necessary capital and demonstrating confidence in Alberta. Access to capital for Alberta resource firms is strong; however, the non-resource sector faces challenges in attracting investment. Alberta ranks 14<sup>th</sup> on the amount of venture capital invested as a percentage of GDP and based on the number of venture capital deals closed per 100,000 people in 2009, Alberta ranks 9<sup>th</sup>.



# Conclusion

The benchmark measurements identify both areas of relative strength that need to be maintained as well as areas where Alberta performs less well and where actions by government and industry may have the potential to boost Alberta's competitiveness. It also provides a way to track trends and changes in Alberta's competitiveness over time.

## LEGEND

■ Sustained Prosperity ■ Productivity ■ Innovation ■ Foundation

AREAS OF COMPETITIVE STRENGTH	AREAS OF COMPETITIVE CHALLENGE
→ High level of GDP per capita	→ Low growth rate for real GDP per capita
→ Strong growth in personal income	→ Low growth in productivity (GDP per hour)
→ Entrepreneurship – number of business start-ups and high growth firms	→ Declining productivity in mining, oil and gas
→ Taxes and fiscal policy	→ Amount and growth of non-resource exports
→ Good investment in public infrastructure	→ Level of overall investment in R&D by industry
→ High employment rates	→ Level of employment in high tech manufacturing and knowledge intensive service industries
→ Strong high school test scores	→ University degree completion
→ High rates of apprenticeship and vocational/technical post-secondary education	→ Access to venture capital

Alberta is in a strong competitive position. The good news is we have a strong economy and good quality of life. Yet, the province's prosperity is, in part, highly dependent on the resource sector. The report shows there is work to do in the areas of productivity, innovation, managing our human capital, and ensuring that non-resource firms can access the financial capital they need to prosper. The focus must be on industry and government working together to achieve these goals.

From here, the Council will work towards recommendations for action; the necessary steps to keep Alberta's economy on track. The stakes are high – the future prosperity of Alberta and Albertans are being determined by the actions of today.

*"Competitiveness is not about a low-cost labour force, the largest share of exports or even the fastest economic growth. It is about creating the conditions under which companies and citizens can be the most productive so that wages and return on investment can support an attractive standard of living"*

*Competitiveness Index: Where America Stands, US Council on Competitiveness, 2007*



# Competitiveness Benchmarking Summary

This chart summarizes Alberta's relative rating on all 60 benchmarks in the Competitiveness Pyramid. Where data was not available, fewer jurisdictions were used. For comprehensive data and analysis please see the complete report.

## SUMMARY OF COMPETITIVENESS BENCHMARKING INDICATOR RESULTS FOR ALBERTA

Indicator		Alberta's Rank/ Jurisdictions¹	Indicator	Alberta's Rank / Jurisdictions¹	
Sustained Prosperity (# measures compared: 8)		●	The Foundation		
GDP per capita	1/15	●●	Taxes & Fiscal Policy (# measures compared: 4)		●●
Growth in real GDP per capita	11/15	●	Marginal effective tax rate on capital investment	2/15	●●
Personal income per capita, after tax	6/15	●	Top marginal personal income tax rate	3/15	●●
Growth in real personal disposable income	2/15	●●	Total tax burden, % of GDP	4/15	●●
Housing affordability	8/13	●	Government net financial assets, % of GDP	2/15	●
Unemployment rate 2009	4/15	●	Regulation (# measures compared: 4)		●
Unemployment rate 2005-2009	9/15	●	Time required to start a new business	5/10	●
Index of Economic Well-being	2/10	●●	Cost of procedures to start a new business	7/10	●
Productivity (# measures compared: 12)		●	Property transfer costs	5/15	●●
GDP per hour worked	2/15	●	Total business costs	5/13	●
Growth in real GDP per hour	12/15	●	Transportation & Infrastructure (# measures compared: 4)		●
GDP per hour worked, agriculture	2/6	●	Average age of public infrastructure	2/6	●●
GDP per hour worked, mining, oil & gas	4/6	●	Government investment in infrastructure	4/10	●
GDP per hour worked, manufacturing	1/6	●●	Airport passengers per capita	7/15	●

### LEGEND<sup>2</sup>

- ● Excellent (top quintile)
- Good (second quintile)
- Average (middle quintile)
- Weak (lower quintile)
- ● Poor (bottom quintile)

1 The number of jurisdictions compared varies due to availability of data. Alberta's rank is shown relative to how many jurisdictions were compared for each measure.

2 The ratings of Excellent, Good, Average, Weak, and Poor take into account both Alberta's ranking among the jurisdictions compared, and Alberta's measured value relative to other jurisdictions.



# SUMMARY OF COMPETITIVENESS BENCHMARKING INDICATOR RESULTS FOR ALBERTA CONTINUED

Indicator	Alberta's Rank/ Jurisdictions <sup>1</sup>	Indicator	Alberta's Rank / Jurisdictions <sup>1</sup>
<b>Productivity Continued (# measures compared: 12)</b>		<b>The Foundation Continued</b>	
GDP per hour worked, business services	2/6	% of households with broadband internet	2/15
Growth in real GDP per hour, agriculture	2/8	<b>Human Capital and Education (# measures compared: 11)</b>	
Growth in real GDP per hour, mining, oil & gas	5/8	High school math, reading, and science skills	2/10
Growth in real GDP per hour, manufacturing	7/14	High school completion rate	8/15
Growth in real GDP per hour, business services	5/14	Bachelor degree completion rate	11/15
Non-resource exports per capita	10/15	Post-secondary education other than degrees	1/12
Non-resource exports growth	11/15	Apprenticeship completion rate	1/6
<b>Innovation (# measures compared: 12)</b>		Ongoing formal or informal education	3/10
Gross expenditure on R&D, as a % of GDP	14/15	Current employment rate	2/15
Business expenditure on R&D, as a % of GDP	13/15	Change in employment rate	4/15
Growth in total R&D expenditures	8/15	Net migration rate	10/15
Number of US patents received	7/13	Share of labour force aged 55+	3/15
Industrial share of research funding	1/11	Share of labour force aged less than 25	3/15
Investment in machinery & equipment, % of GDP	2/10	<b>Access to Capital Markets (# measures compared: 5)</b>	
Investment in ICT equipment/software, per employee	2/7	Available credit ratio	2/6
Employment in high-tech manufacturing	13/14	Business sector foreign investment, total	1/6
Employment in knowledge-intensive services	13/14	Business sector foreign investment, non-resource	4/6
Employment in natural and applied sciences	1/6	Venture capital investment, as a % of GDP	14/15
Number of business start-ups	1/12	Venture capital deals, per 100,000 people	9/13
High growth firms, as a % of all firms	1/9		



*FOR MORE INFORMATION OR TO  
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**Government  
of Alberta ■**